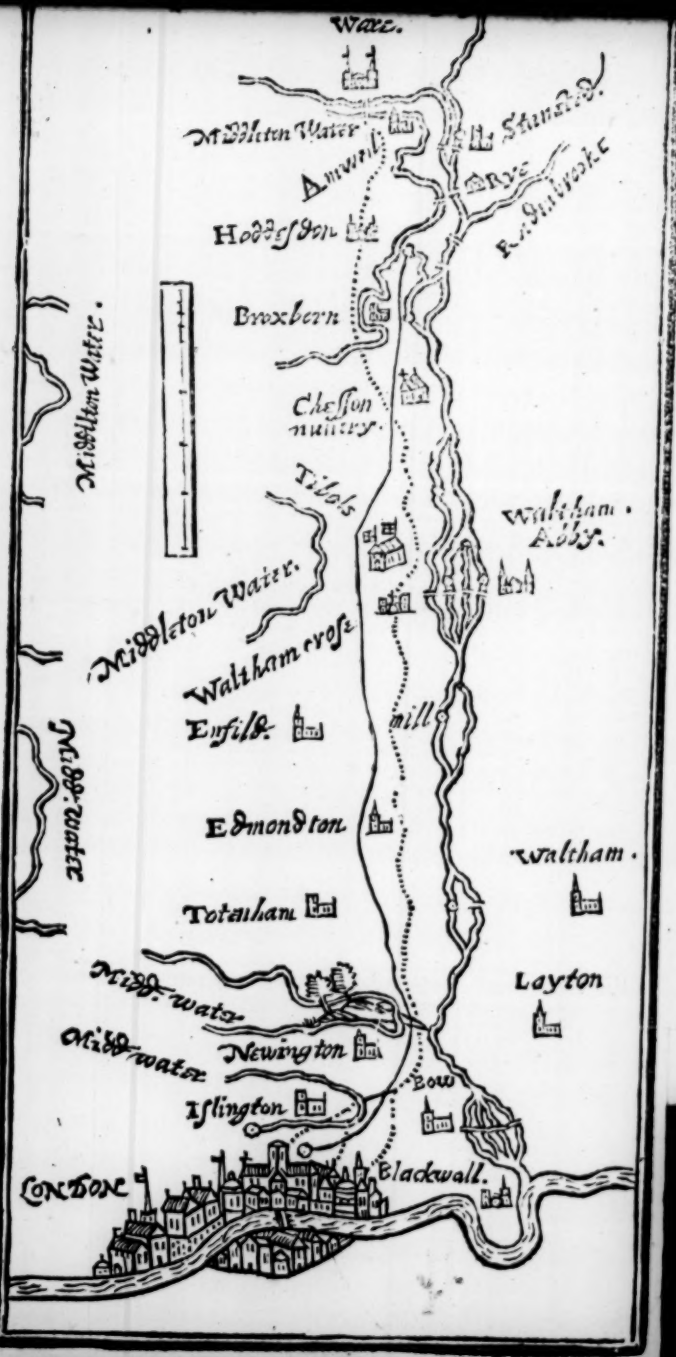
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Stanstead
Rye
Hoddesdon
Broxborn
Chesson nuntry.
Tibols
Waltham Abby.
Middleton Water.
Waltham cross
Enfield.
mill
Edmondton
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Middleton Water.
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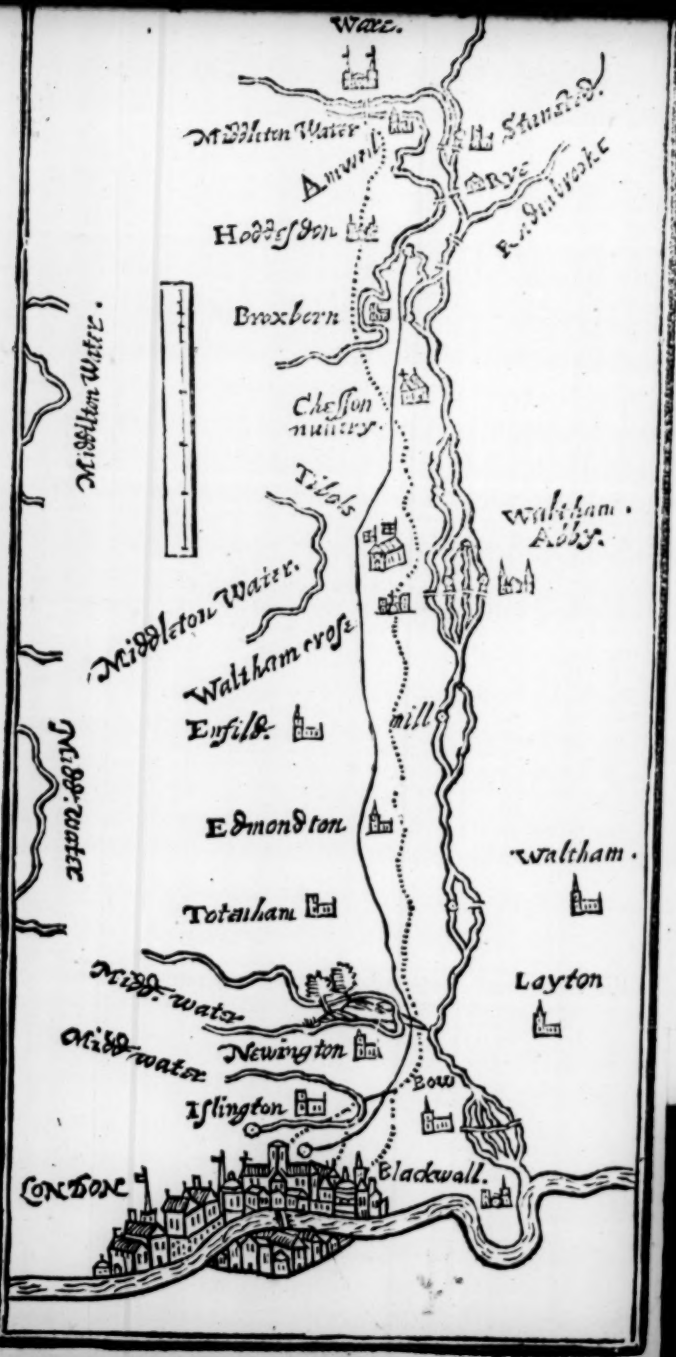
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HIS

ANSVVER

TO

Mr. Fords Book,

ENTITVLED,

A DESIGNE

For bringing

A Navigable River, from

Rickmansworth in *Hartfordshire*

to St. *Giles* in the Fields.

London, Printed by *R. H.* 1641

To the Kinges most Excellent Ma

Your Sacred Matie may be pleased to remember, That being not long since a lone in the Garden att Whitehall I tooke the oppertunitie to acquaint your Ma^ty That Mr Fo had preferred a Bill in yor Maties name to the Lorde of the Parliament In which he pretended and alleadged that the Aqueduct from Hodsdon was deserted as being feasible the waters thereof wanting height quantitie and quality to supply those pla wth were to be supplied by it or to raise the Rent reserved to your Ma^ty to wth you were pleased to make this Answeare: That for the quantitie and quality of those Sp you knew them to be without exception: But for the height of them you doubted they were not high enough to serve the Coven Garden and the other new buildinge. I assured your Ma^ty that those Springe as they were now without being raised did lye 22 foote higher then the highest ground at the Pyatch in the Coven Garden, And they might be raised if need were. Your Matie wonderinge a little att it, And asked how that could be since Middletons water wth lay higher then these Springe, was not high enough to serve those places. I informed your Matie that the reason why Middletons water did not serve those places was not because it wanted height, But because hee had made use of his height but had carried his water to the lower places first and then could not raise it to serve the higher. That the superficies of Middletons water in his Conserve att Islin tics. 20 foote higher then the highest ground in the Coven Garden And that theis Springes enough they now lye lower then Middletons River att that place by 13 foote yett they mig be brought to a Conserve att Islington. 3 foote higher then his because his water is carryed an open Trench or Cutt 48 myle W^ch betweene the Head of the Springe, and the Conserve Islington and was allowed 4 inches fall in every Myle wth is 16 foote Soe as the water in Conserve is 16 foote lower then the same is at the Springe Head. Whereas Linch Mill and Springe, being brought in a Close Aqueduct will rise as high att the Conserve att Islington they are in the Pond att Linch Mill wth will be 3 foote higher then Middletons water is: And soe much as theis Springes shalbee raised soe much more their height wilbee att the Conserve and the Coven Garden: I also informed your Matie That the Worke pr by Master Ford could not be soe much for your Matie proffitt and the good of yor people as this close Aqueduct would be because his water being brought open as Middletons could not be soe pure nor soe profittable unto your Matie as this would bee being brou close. Your Matie being (as I conceived) satisfied with these reasons. I did beseem you

To give mee leave to preferr a Bill in yo: Matie name for this close Aqueduct as Mr Ford had done for his open River. Your Matie Comaunded mee to sett downe my proposicon in writinge and to deliver it to my Lord Treare (the Bishopp of London) from whome I should receive your Matie answeare and pleasure. I did observe your Comaunde and his Lo^pp^ tould mee that your Matie did like the proposicon well ingenerall and onely doubted of one thinge in it; which was that water would not runn upon exact Levell, and I proposed to make the Channell upon a Levell or with as little fall as might possibley be given in soe great a length of way: I satisfied his Lo^pp^ in this particular with this Answeare, That though the Channell were made upon a Levell yett being close all the way and att the head: The water would have soe much fall as was betweene the topp of the water in the Ponds and the bottome of the Channell which I hope swill alsoe satisfie your Matie who well understand Workes of this nature And the Arguement is very cleare and evident and not to be denyed: Master Ford finding that this project of his had not that acceptance and success which hee expected hath lately sett out a Booke in printe for the makeinge of a Navigable River from Rickmansworth in Hertfordshire to St Giles in the Fields which Booke I have Answeared in this ensueinge Treatise; And have alsoe shewed the feasibility and benefitt of the close Aqueduct undertaken by my selfe and others both wth I here most humbly present and prostrate to your Maties most royall and princely Judgment, And doe as humbly beseech your Matie to cast a gracious eye and aspect upon it, and the Autho^r^ of it

Your Maties most humble and faithfull Subiect and Servant

W^r^ Roberts

Sir Walter Roberts HIS ANSVVER TO Mr. Fords Book Entituled *A Designe for bringing a Navigable River from* Rickmansworth *in* Hartfordshire, *to* S. Giles in the Fields.

THe Kings most excellent Majesty, taking into his princely consideration, the great inconveniences that his loving Subjects about London, and Westminster, did suffer for want of water, put a Bill in Parliament for the bringing of water from Rickmansworth. Mr. Ford.

His Majesty beares the name of this Bill, but Master *Ford* the charge, as he confessed to a Gentleman of quality, to whom he said not long since, that this businesse had cost him an hundred pounds, and the very Bill twenty four pounds, which is more (I beleeve) than ever he will get by it: and in the Bill there are some things affirmed, which his Majesty disavowes, and knowes to be otherwise; and certainly Master *Ford* was not well advised to prefer a Bill in his Majesties name, and to alledge any thing in it, which his Majesty did not know, or beleeve to be true, and which he himselfe could not prove, nor make good; and if some man Answ.

had done this, it would have been accounted a great offence, and taken for no leſſe than *crimen leſæ Majeſtatis*. For to make the King publikely in Parliament ſpeak any thing in a Bill, which is not true, is an high diſhonour to his Majeſty, and ſuch as deſerves an high cenſure. And this Maſter *Ford* hath done who in that Bill hath made his Majeſty contradict himſelfe and the Great Seal of *England*, and deny many things concerning the Springs at *Linch-mill*, and the feacibility and benefit of the cloſe Aqueduct, which he had before affirmed in ſeverall Patents and Grants concerning the ſame, and to affirme ſome other which were to Maſter *Fords* knowledge diſproved by depoſitions of witneſſes, and Records of Courts which he had ſeen.

Another great errour Maſter *Ford* hath committed, in his little book. In the firſt and ſecond pages whereof, he makes his Majeſty the authour of the leſſe deſigne, (to bring water to the City) and himſelfe of the greater, to make a Navigable River) but this ſlip may in ſome meaſure be excuſed, That his Majeſties deſigne is feacible, and Maſter *Fords* is not.

I could charge him with another over-ſight as great as any of theſe, That he did not foreſee the great benefit that this new Navigation would be to the City and Countrey before this Bill was preferred, and adviſe his Majeſty to prefer his Bill for this worke, rather than that, ſince he (as appeares by his book) was to be the undertaker of both, and now preferres this as the better worke: but I will not overcharge him, nor ſtay longer upon the Preface (the porch of his book,) but will now enter and ſurvey the building; (The reaſons which he brings to ſhew the benefit of his Navigable River)

River) which are eleven in number; and I might answer them all in one word; by saying (as I may very truly,) that out of them all, there cannot be collected one good argument to prove, that this worke if it were done, would be any benefit to City or Countrey, but for his and others satisfaction, I will make a particular answer to them all.

And first, to the first, I answer: That to set great multitudes of labourers on worke, is not simply good in it selfe, but quite contrary, unlesse the worke which they are imployed in be good for the Common-wealth, which this is not, as appeares by the complaint of the Countrey against it, and not of ordinary men onely, but of the principall Lords and Gentlemen of the County. 1.

To the second I answer, That *Hartfordshire*, *Buckinghamshire*, and *Middlesex*, want not vent for their Corne, Meale, or other commodities, but do buy and sell them as cheape as other Counties do, and therefore they need no navigable River for this purpose. 2.

His argument doth onely concerne that part of *Hartfordshire*, which would border upon his new River, if it should be made, and they do most of all oppose his worke, and therefore certainly they conceive it will be noxious, not commodious to them. And if it be not good for them, it cannot be good for any, since other places may have chalke, manure, and other commodities as well and as cheape from other Counties, as from *Hartfordshire*, and then what benefit will this navigable River be to them? 3.

To the fourth I answer, That the River of *Thames* is 4.

bigge enough to carry away all the ſoil that is made in or near *London* or *Weſtminſter*, and lies farmore conveniently for it, than his new River will do, and there is land enough bordering upon this River to receive it all, if it were ten times as much, without making a new River, to carry it into *Hartfordſhire*.

5. 5. To the fifth I anſwer, That fewell and other commodities, are as cheape in *Hartfordſhire* as in other Counties, neither could this new River, if it were made, make them cheaper.

6. To the ſixth I anſwer, That *Hartfordſhire* is not ſo hot a Clymate, or the Cattell there of ſo calid a conſtitution, but that leſſe water than a Navigable River may ſatisfie their thirſt.

7. To the ſeventh I anſwer, That Maſter *Ford* is much miſtaken in thinking that carriage doth ſpoil high-wayes, for we finde by experience, that the greateſt Roades are alwayes the beſt, and blinde lanes the worſt wayes: The Reaſon whereof is, becauſe much carriage and travelling upon them, makes them even and ſmoothe, and the want of this makes the other uneven and rugged, neither doth carriage ever hurt high-wayes, but in ill weather, carriage being the onely meanes we have to mend them, by bringing gravell and other amendment for them.

8. To the eighth I anſwer, That the Cities of *London* and *Weſtminſter* may perhaps (if his worke be done) have the Ornament of a great new Ditch, but not of a Navigable River, it being impoſſible to make a Navigable River to S. *Giles* in the Fields, with any reaſonable charge. There being ſo many great hils and valleys between *Rickmanſworth* and it, and the ground of Saint

Giles

Giles being above 60. foot higher than the natural course of that River at *Westminster*.

9. To the ninth I answer, that certainly other Counties which border upon the River of *Thames* and the River of *Lee*, may serve and supply *London* and *Westminster*, and other places adjoyning, with Corne and other commodities as cheape as *Hartfordshire*, if this new River were made, and therefore the making of it can no way advantage them. 9.

To the tenth I make the same answer, which I did to the fourth, it being the same in substance contracted into fewer words. That the River of *Thames* will carry away the doung and soil of this City better and cheaper than his new River, for it will go all the way downe hill to *Thames*, but must go up hill to S. *Giles*. Besides some parts of the City lie above two miles from S. *Giles* in the Field, whereas no part of it lies above halfe a mile from the *Thames*. 10.

To the eleventh I answer, That those places in or near *London*, which want water, shall be better supplied, by the Aqueduct undertaken by Sir *Walter Roberts* and others, than they can be by his worke; who may perhaps bring more water than *Middleton* hath done, but cannot bring better in an open River; but by the close Aqueduct from *Hodsdon* all those places in or about *London* and *Westminster* which want water, shall be plentifully supplied with pure and clear spring-water fit for any use, which Master *Fords* being brought open cannot be. 11.

And whereas he affirmeth, that the water of his Navigable River shall be such as shall be alwayes clear, and fit for all uses; I wonder at his confidence, and cannot imagine that any understanding man can beleeve it, that

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is not a Catholique, and led by an implicite faith; there being no Navigable River in the world that is alwayes clear, but will be foul and muddy in floods and great rain; when land waters and washings of streets and high-wayes fall into it; neither can any art or artificiall conveyance keep these out, unlesse M. *Ford* can make such a case for his new River, that no water at all shall come into it in flouds, which he may do by making it onely in Paper, as he hath done, and that in my opinion will be his best way, for this Navigation (I mean his book) will hurt no body but the Printer; the other will hurt many, and be good for none.

And thus having answered the reasons which he hath brought to shew the benefit of his new Navigation, I come now to answer those allegations, which he offers to remove the objections made against it by the Countrey, which as he saith in his book, are these five.

1. The depriving them of their fish.

2. The hindering their winter land-flouds, which enrich their meadowes, and bring downe a fat soil called Moor-earth, of which they make great advantage.

3. The taking away their fences made by the River.

4. The spoiling of their corne-mils, and consequently their Markets, which consist much of Meale.

5. And of their Paper-mils.

To all which he answers. *First, in generall, That all these objections arise from a mistake, as if the purpose were to take all their Water, whereas it is intended, and shall be sufficiently secured, that no more water shall be turned from the ordinary course than what shall run between an hatch of four foot wide.* Which answer is so far from removing, or satisfying any one of those objections, that it is a convincing

vincing argument to prove them all; for a hatch of foure foot wide upon a good fall, will carry away more water, then runs in that River; and if he take away so much as such a hatch will receive, he will leave them none, or very little; which may be made demonstrative, by drawing a gate of foure foot wide at any of those Mils, which stand upon the maine River, which I dare undertake shall carry away the water faster then the whole River can bring it down, and in short time shrink it so as it shall be visible: and therefore Master *Ford* hath either expreſt himselfe ill, or else he doth not well understand workes of this nature, it being a vaste deale of water, that a hatch of foure foote wide upon a good fall will carry away.

1. I have done with his generall answer, and come now to the particulars of it. Where he saith: first, That none of their fish shall be diminished, but shall all bee shut out of his River by a great set made at the head of it; which I confesse may be done: but if he take away the water from the fish, he were as good take away the fish too.

Secondly, he saith that their winter floods may and must be wholly kept out of this Trench, which shall receive no muddy water into any part of it, nor more water in winter than in summer, which is impossible, unlesse as I said before, he meane only to make a Paper river; and then he may let into it, and into his owne imagination, though not into other mens, what water hee pleaseth and when he pleaseth; but otherwise to say that his River shall receive no muddy water, when there is none but muddy water in the River from which he receives it (as in floods) nor more water in winter, than in 2.

ſummer, when the very raine from heaven, which hee cannot ſhut out of his River, is more in winter than in ſummer, is a ſtrange aſſertion.

3. To the third he ſaith, that it is preſumed that an inch of water taken away from the depth of the River, will make no conſiderable difference to their fences, which is confeſt, if that were the caſe as it is not, for a hatch of foure foot wide will not take away an inch only from the depth of their River, but an ell if it be ſo deep in all, and the hatch laid low enough.

4. To the fourth I anſwer, that M. *Ford* cannot now with any reaſon ſay, that he will take but a little water out of the River of *Colne*, ſince in the bill which he hath preferred in his Majeſties name, he ſaith, that he will by his new River bring a far greater quantity of better water to *London*, then can be brought from Lynch-mill ſprings, which are now found to be ſo great, that it is feared by many, that the taking of them away, may hinder Navigation upon the River of *Lee*, which is 80. foot wide, and eight foot deep: and if M. *Ford* take away more water out of the River of *Colne*, which is far leſſe then *Lee*, it muſt needs exceedingly prejudice, if not utterly deſtroy all the Mills ſtanding upon it, below his new River. And though ſome of them have as he affirmes, the water of ſix Rivers to ſerve them now, yet if he take away all this water before it come at them, as he may doe by a hatch of foure foot wide, they will be little the better for it. And I doe confidently beleeve, that there are none, or very few of thoſe mills but at ſome time or other want water; and then if Maſter *Fords* new River take away any from them at thoſe times, they muſt needs want ſo much more as he takes away, neither

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is this any thing which he alledges that a great deale of this water doth runne waſt, which cannot be avoyded in leſſe ſtreames then this is, though the Millars want water never ſo much, becauſe where the ſtreame wants either height or quantity to maintaine the Mils without being pent, there it muſt needs run over as often as the Mill ſtands ſtill, after the Pent is full, though the Millar at another time may want that weter, which thus runs waſte. And the reaſon why Millars pend up their water in ponds and river is, becauſe the water without being pent, wants either height or quantity to ſupply their Mils, for if it had both theſe, and would ſerve their turne as well without being pent, they would not trouble themſelves to make and maintaine pends.

To the fifth and laſt I anſwer, that the caſe of the Paper-mills and Corne-mills, being the ſame, the ſame anſwer may ſerve for both, which is briefly this: That if ſo much water, as a hatch of foure foot wide will receive, be taken out of the River of *Colne*, it will utterly deſtroy all the Mills below it, becauſe it will take away all the water of that River if it were bigger then it is. 5.

It therefore plainly appeares by that which hath been ſaid, that this propoſition of making a Navigable River from *Rickmanſworth* in *Hartfordſhire* to S. *Giles* in the fields, is not fit to be proſecuted any further, being a worke of great difficulty, of exceſſive charge, and of more prejudice then benefit, both to the Countrey and City. So ſhallow and unfit this *Ford* is to make a Navigable River.

But if the Inhabitants of *Hartfordſhire* conceive that Navigation from *Rickmanſworth* to *London* will bee a worke of any great benefit to them, I can ſhew them a

better way to make a Navigable River from thence to *London* (though not to S. *Giles*) then that which M. *Ford* propoſeth, and that is by widening and deepning the River in his naturall courſe, where it is either too narrow or too fleet, and by making lockes in ſome convenient places.

All which may be done with a quarter of the charge which M. *Fords* worke will coſt, and without any prejudice either to the Mills or Lands, nay with ſome benefit to them both, becauſe they ſhall have the ſame water, which they now have, and ſo much more as the River will containe more, being made wider and deeper, and pent higher. And this worke I conceive may bee done with a reaſonable charge, though I can only affirm it probably, not knowingly, becauſe I have not yet ſurveyed it throughly, and being done, it will be far more uſefull and profitable to the Countrey in reſpect of Navigation, then M. *Fords* deſigne. And for ſupplying the City and other places with water, that may be done alſo by the Aqueduct from *Hoddeſdon* far better than by his new River, whether he make it Navigable or not, and both theſe workes may be finiſhed with halfe the charge that his Navigable River will coſt. And if the Countrey may be accommodated with better Navigation, and the City ſupplyed with better water, for halfe the charge that M. *Fords* worke will coſt, I preſume the Lords before whom the cauſe is now depending, will not ſuffer his propoſition to be proſecuted any farther.

I have done with the worke which he propoſeth, and now come to the ſecurity which he offers for the performance of it, eight thouſand pounds a yeare Lands, which is at the leaſt ſix thouſand pounds a yeare more then

then he hath, or is likely to have of his owne. And if there be any ſuch men to be found in the world, as will engage ſix thouſand pound a yeare Land upon another mans project, grounded upon no more probability of reaſon then this is, They ſhall have my voice to be recorded for more then kinde friends, and perhaps their poſterity will have cauſe enough to thinke them kinde fooles, but I cannot beleeve that there are any ſuch, and and if there be, Maſter *Ford* hath done well to conceale their names: But if he can give ſuch great ſecurity, why doth he not rather take up ſo much money at intereſt as will doe the worke, and take the whole benefit of it to himſelfe, and his partners, then to receive twenty five thouſand pounds of his Majeſtie, upon condition to pay unto him and his heires for ever foure thouſand pounds a yeare out of the rents and profits of the worke, ſince foure thouſand pounds a yeare would in leſſe then ten yeares pay twenty five thouſand pounds with the intereſt, and this would be leſſe dangerous, and more commodious for M. *Ford*, and for his ſureties, who by this meanes ſhould in fifteene yeares, if the work ſucceeded, be abſolutely freed of their ſecurity, and M. *Ford* and his partners ſhould enjoy the whole benefit of the work afterward, whereas now their Lands muſt ſtand engaged for ever, if the worke goe on; and M. *Ford* and his aſſociates muſt for ever pay foure thouſand pounds a yeare to his Majeſty, and his heires, if the whole rents and profits of the worke ſhall amount to ſo much. And therefore M. *Ford* cannot perſwade me, that he can any where take up twenty five thouſand pounds upon this ſecurity, for if he could, why ſhould he take it of his Majeſty upon ſuch hard conditions, as to pay foure thouſand pound

a yeare for ever for it? And if no other will lend him twenty five thousand pounds upon this security, why should his Majesty? Who cannot hope that this Navigable River (if it could be made with any reasonable charge, as it cannot) would yeeld halfe foure thousand pounds *per annum*. And his Majesty can have no more rent or profit out of the worke then it will yeeld: whereas the close Aqueduct, if it be well and artificially done (as it shall be if Sir *Walter Roberts* and his partners have the doing of it) is in probability like to be worth tenne thousand pounds a yeare, and so his Majesty and his heires shall be sure to have their rent of foure thousand pounds a yeare, well and duly paid them for ever. Besides, this close Aqueduct will be a great benefit to the City, and no prejudice at all to the Countrey. And I know the honour and justice of the Parliament is such, as they will prefer that work which they shall conceive to be most for his Majesties profit, and the publique good.

I have now done with the security, and with this designe of M. *Fords*, and so I hope hath he; which I wish for his good, and the good of all whom it concernes.

FINIS.

A PROPOSITION FOR

the ſerving and ſupplying of *London*, *Weſtminſter*, and other places adjoyning; with a ſufficient quantity of good and cleare ſpring-water, to be brought from *Hoddeſdon* in *Hartfordſhire* in a cloſe Aqueduct of Bricke, Stone, Lead, or Timber.

THE Cities of *London* and *Weſtminſter* being growne very populous; and there being of late many faire houſes and other large and ſpacious buildings erected in them, and in the *Cevent garden*, S. *Martins*, S. *Iames*, S. *Giles*, *Drewry-lane*, *Lincolnes-Inne-fields*, *Holborne*, and other places adjacent: and there being alſo a great want of good water in all the ſaid places, eſpecially in the new buildings; the works already done being not ſufficient to ſupply them, and *Middletons* water by reaſon of the foulenеſſe and muddineſſe of it (comming in an open trench) being found by experience not to be fit for many uſes, and to faile many times for a whole week or fortnight together.

His Majeſty out of his Princely care and zeale of the publique good, conſidering the many and great miſchiefes that his loving ſubjects inhabiting within theſe Cities and places, muſt needs ſuffer by the want of ſo neceſſary a commodity; And knowing the great benefit that

that will accrew unto them by having plenty and abundance of good and pure water, being informed, that there were certain ſprings of excellent water at *Hoddeſdon* in *Hartfordſhire*, that might conveniently be brought in an Aqueduct of Brick or Stone, to a conſerve at *Iſlington*, and from thence diſperſt to ſerve and ſupply all the ſaid places, did for his better ſatisfaction grant a commiſſion to Sir *Charles Herbert* and others; to examine whether theſe ſprings were ſufficient for height, quantity and quality, to ſerve and ſupply all the ſaid places, and what the charge of the worke would be.

In *March* 1636. theſe Commiſſioners did certifie his Majeſtie that theſe ſprings did lie 33. foot and 6. inches higher than the pavement at the Croſſe in Cheapſide (which is 22. foot higher then the Pyach in the Coven garden.)

That they did yeeld for quantity above 12000. Tun of water in 24. houres, and that they were naturall and conſtant ſprings which did neither increaſe much in winter with landwaters, nor decreaſe in ſummer, but had continued ſo time out of minde.

That they were for quality very good and well conditioned waters, fit for dreſſing of meate, for Baking, Brewing, or Waſhing. And that they had cauſed divers tryals to be made of them in their preſence for their better ſatisfaction.

That there were divers other ſprings hard by them which might conveniently (if need were) be raiſed and brought with them. And that theſe ſprings might bee brought in an Aqueduct of Bricke, to a conſerve at *Iſlington* for 25000. pounds, and the Mill and Lands purchaſed for 750. pound more.

Upon

Upon this Certificate, and upon hearing the cauſe himſelfe at the Councel-table, his Majeſty was pleaſed to grant his Letters Patents to *Michael Parker* and *Everard Manwaring* for the raiſing of 25000.l. for this worke.

And about the ſame time, he alſo granted other Letters Patents to Sir *Edward Stradling*, and *Iohn Lyde* for the doing thereof: In which his Majeſty did covenant to allow them 25000.l. for the doing of the worke, and to aſſiſt them and their aſſociates by the beſt wayes and meanes he could, either by making them a Corporation, or by giving his Royall aſſent to an Act of Parliament for the better effecting thereof. And they did covenant with his Majeſty to finiſh the ſaid Aqueduct in five yeares; and to raiſe out of the rents and profits thereof 4000. pounds a year to his Majeſty and his heires for ever; Or elſe to pay backe the 25000. pounds or ſo much thereof as they ſhould receive.

Sir *Edward Stradling* did afterwards aſſociate to him Sir *Walter Roberts*, M. *Gage*, and M. *Newce*: and thereupon the contract was renewed.

Upon the death of M. *Gage*, M. *Raleigh* was brought in his room, and the contract with his Majeſty was renewed again, under the great Seal of *England*; and the other undertakers did make choice of Sir *Walter Roberts* to have the overſight and ordering of this worke; who with their conſent and allowance cauſed the levels to be again exactly taken, and a plot made of the grounds, through which the Aqueduct was to be carried; which was done by M. *de Boyes* a German, an expert Artiſt.

After this, Sir *Edward Stradling*, M. *Raleigh*, and M. *Newce*, deſerting the worke, and deſiring to be freed of the ſecurity which they had given to his Majeſty for the

performance of it, Sir *Walter Roberts* did in *December* laſt by petition acquaint the Lords of the Parliament with it; and did withall deſire that he might have liberty to go on with the worke, according to the contract with his Majeſty, giving ſecurity to performe it.

Upon this petition of his, the Lords of the Committee for petitions did make an Order the 24. of *December*, by which they did declare, that they did well approve of the worke, and thought fit the petitioner Sir *Walter Roberts* ſhould undertake the ſame. And their Lordſhips did likewiſe order, that all the parties therein named ſhould attend them in the Painted-Chamber upon the 14. of *Ianuary* following, at two of the clocke in the afternoon, to give an account of the monies which they had received and had in their hands for that worke.

The parties did attend accordingly, and M. *Ford* did then prefer a petition to their Lordſhips, in which he did pretend and alledge, that this worke which Sir *Walter Roberts* and others had undertaken was not feacible, the waters of thoſe ſprings wanting height, quantity and quality, to ſupply the ſaid Cities and places with water, or to raiſe the rent reſerved to his Majeſty. And he did likewiſe informe their Lordſhips, that the worke was deſerted; though he knew the contrary, and had ſeen the Order above mentioned.

The Lords rejecting his petition, and one of them ſaying, that it was not fit to overthrow a contract under the great Seal of *England*, upon a petition; He not long after preferred a Bill in his Majeſties name; in which he ſuggeſted the very ſame things which he had done before in his petition. After this Bill had been read the firſt time in the Lords Houſe, Sir *Walter Roberts*

berts and Maſter *Ford* meeting often in the Commitee Chamber, and diſcourſing together about this buſineſſe, In the end fell to this agreemeut, That they ſhould joyne together and undertake that worke which ſhould be moſt for the common good. This agreement was ſet downe in writing, approved of by them both, new written by conſent, and a time and place appointed for the ſigning of it. But M. *Ford* ſending his man to excuſe his not comming to ſigne it, got his Bill that morning to be read the ſecond time and committed, which was not fair dealing.

When the cauſe came to be heard before the Lords, M. *Ford* was not able to prove any one of his objections againſt this worke. But on the contrary Sir *Walter Roberts* did diſprove moſt of them by the certificate of Sir *Charles Herbert* and others.

M. Attourney Generall being preſent at this debate, and of counſell for the Bill thus preferred in his Majeſties name, was pleaſed to ſay, that in reſpect of the contract which Sir *Walter Roberts* had from his Majeſty, and the Order made by the Lords of the Parliament upon his petition, if Sir *Walter Roberts* could either by reaſon or demonſtration ſatisfie their Lordſhips judgements, that the worke which he had undertaken was feacible, and that being done it would be ſufficient to ſupply all thoſe places with good and uſefull water which were to be ſupplied by it, he thought fit, that he ſhould have the doing of it before any other, neither ſhould he ſtand much upon the ſecurity: but if he could not do this, then it was fit he ſhould give good ſecurity for the performance of what he had undertaken, if he would go on with it.

Upon this motion of M. Attornies, M. *Ford* offering ſecurity for the work which he propoſed, and the Lords conceiving that ſecurity for the performance of a worke was better than any demonſtration of reaſon, did order.

That if Sir *Walter Roberts* ſhould give good ſecurity for the performance of the Aqueduct which he had undertaken, he ſhould go on with it.

Sir *Walter* upon this reſolution of the Lords, did addreſſe himſelfe to the Court of Aldermen, and did in open Court acquaint them with the ſeverall propoſitions which had been made to his Majeſty and the Lords of the Parliament, concerning the ſupplying of *London* and other places with water.

One by himſelfe, who had contracted with his Majeſty to bring certain ſprings of clear and excellent water, from *Hoddeſdon* in *Hartfordſhire* to *London*, *Weſtminſter*, and other places adjoyning in a cloſe Aqueduct of Bricke, Stone, Lead, or Timber.

The other by M. *Ford*, who propoſed to bring part of the River of *Colne* from *Rickmanſworth* in *Hartfordſhire* to a Conſerve at S. *Giles* in the Fields, in an open trench or cut (as *Middletons* was,) and from thence to diſperſe it, to ſerve the ſaid places, and did deſire them to declare their opinions, which of the two workes would (as they conceived) be beſt for their City.

After ſome debate, they all agreed that the cloſe Aqueduct would be far more uſefull and beneficiall to them, than an open River (as *Middletons* was) could be; ſince they wanted not water ſo much, as good water, and to bring more ſuch water, as *Middletons* was, would be no benefit to them, becauſe they which had *Middletons* water, were fain to be at a great charge to buy Conduit water, *Middletons* not being fit for many uſes. When

When they all thus agreed, that a cloſe Aquednct would be far better for them, and for all whom it concerned, than an open River, Sir *Walter* did make this requeſt to them, that for the good of their City, the benefit of the worke, and the ſatisfaction of the King, and the Parliament, that the money raiſed, and given for this Aqueduct ſhould not be miſimployed, they would be pleaſed to take the ſame into their care and cuſtody, and ſee it expended upon the worke as it went on, And to invite them to conſent to this, he told them, they ſhould have it at a very eaſie rate, at five *per Cent.*

The Court after ſome private conſultation, did make this anſwer to Sir *Walters* requeſt. That if his Majeſty, and the Lords of the Parliament ſhould thinke it fit, they would be willing for the good of the worke, to be our Treaſurer for the money, and to let us have it, as we wanted it; but to give any intereſt for it, that they did not thinke fit, ſeeing they gave none for *Pauls* money, or any other monies put into their hands for pious or publique uſes.

Sir *Walter* having received this anſwer from the Court of Aldermen in approbation of this worke, not long after preferred a petition to the Lords of the Committee for the Aqueduct, and in it tendered ſuch ſecurity for the performance of the worke, as their Lordſhips did approve of, as appeares by nine of their hands ſubſcribed to his petition.

About the ſame time he alſo preferred a Bill in the Houſe of Commons, to have an Act of Parliament for the better effecting of this publike good worke, which Bill hath been twice read, and is referred to a Committee.

When M. *Ford* ſaw that neither his petition, nor bill

did prevail, but that Sir *Walter Roberts* went on ſtill with his worke, he deſerts them both, and makes now a new propoſition, which he hath lately ſet out in print, and that is to make a Navigable River from *Rickmanſworth* in *Hartfordſhire* to S. *Giles* in the fields, which is a worke not to be done without a charge infinitely greater than the profit, there being ſo many great hils and vallies between thoſe two places, beſides the ground at S. *Giles* his Church, being above 60. foot higher than the naturall courſe of that River at *Weſtminſter*; And the making of his River Navigable, will not make his water better, but worſe, and will onely multiply his charge, but not his profit.

And if the County of *Hartfordſhire* did oppoſe his firſt propoſition, which was onely to take ſo much water out of the River of *Colne*, as would ſupply *London*, *Weſtminſter*, and their ſuburbs, becauſe the taking of ſo much onely out of that River, would (as they conceived) much prejudice all their Mills ſtanding upon it, and deprive them of that benefit, which they now have by them, and by flowing of their lands, they have much more reaſon to oppoſe this new propoſition, which is to take a greater out of a leſſe, a Navigable River, out of a River which is not Navigable.

And though he pretend, that he will not ſhrinke the River of *Colne* halfe an inch, nor prejudice their Mills, or hinder the flowing their lands, yet I doubt *Hartfordſhire* men, whom it concernes, will hardly beleeve him; and the argument he brings to prove it, and to ſatisfie them withall, is a convincing reaſon to prove the contrary: for a Hatch of four foot wide upon a good fall, will carry away more water than is in this River, ſo much

much M. *Ford* is miſtaken in affirming that by ſuch a Hatch he will not take away the fortieth part of the water thereof.

And for the benefit which he pretends the Cities of *London* and *Weſtminſter*, and other places will receive by this new Navigation, it will be ſo little to them who have better Navigation already by the Rivers of *Thames* and *Lee*, than any M. *Ford* can make from *Rickmanſworth*, as it will not be conſiderable, the lands bordering upon theſe two Rivers, being ſufficient to receive ten times as much ſoil, as theſe two Cities can make. Neither doth *Hartfordſhire* afford any commodities to ſupply theſe Cities withall, which may not be had as well, and as cheap from other Counties.

And the worke undertaken by Sir *Walter Roberts* and others, which M. *Ford* would overthrow to bring in his new Navigation, will be a worke of far greater benefit to thoſe Cities, and places, (which want good water more than Navigation) than another Navigable River can be. And this worke as it is propoſed and intended by Sir *Walter Roberts*, will be a very great benefit to the City, and no prejudice at all to the Countrey; nay, it will be a benefit to ſome parts of it, *viz.* to ſuch houſes, townes, and villages, as want good water and lie near it, and to thoſe owners and farmours through whoſe lands it ſhall be carried: for theſe ſhall have a full value paid them in hand for ſo much of their land as ſhall be cut and uſed for the worke, and yet ſhall have the poſſeſſion and profit of it, and ſo ſhall ſell their land and yet enjoy it; and thoſe may be ſupplied with excellent water from this Aqueduct which is no ſmall benefit to ſuch places as want it. And for the damage which any

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can receive by it, it wil be only in cutting & ſoiling their lands, and carrying materials for the worke over them whileſt the ſame is in doing; and for this being paid as before, more than a full value, it changes the name and nature of it, and makes it of a damage a benefit: and other damage than this no man ſhal receive by this work.

For firſt, Sir *Walter Roberts* will take no water out of any Rivers, and therefore no way prejudice Navigation.

Secondly, he will divide or take away no mans ground, but onely make a cut through it, and fill it up again, ſo as men ſhall ride, go, or carry, plow or ſow over it, as they now do, and make the ſame profit of it in every reſpect.

Thirdly, before they begin to worke in any mans Land, they will compound with him, and give ſatisfaction for the damage they ſhall do him.

This worke being well done with good Brickes, and other materials, will not fail in many ages, unleſſe it be in ſome few places, where it muſt be carried above ground, and there it may very eaſily be amended, when it ſhall fail; neither can any man be much prejudiced by it, if a breach ſhould happen in it, ſince the water may at any time upon an houres warning, be turned into his naturall courſe where it now runs, and the Aqueduct laid dry, by ſewing the pond where the ſprings riſe, to which end there ſhall be a large gut laid at the bottom of it, to draw up and to ſew the pond upon any occaſion. And this alone will ſufficiently ſecure all the Lands through which this Aqueduct ſhall paſſe, from any damage or danger of being flowed by it. And for the better ſatisfaction of all whom this worke concernes, the manner how it is intended to be done, is here expreſſed.

Firſt,

Firſt, the Pond in which the ſprings do riſe ſhal be ſewed, the mud therein caſt out, the land waters ſhut off, and all things elſe removed that may annoy the water.

This being done, the Pond ſhall be walled in, and the ſprings raiſed as high, as they will riſe without looſing any part of them; when it appeares how high they will riſe, then the Pond ſhall be emptied, and paved at the bottom with Bricke or Stone, and the bottom of the channell laid levell with the bottom of the Pond, and carried from thence, upon an exact levell, (or with as little fall as may be given in ſo great a length of way) to the Conſerve at *Iſlington*.

This channell ſhall be made of ſuch bigneſſe, and ſtrength, as it ſhall receive, and carry away all thoſe ſprings, and as many more if need be, as faſte as they riſe, and ſhall be made with ſuch morter, and covered at the top two foot thicke at the leaſt, with ſo good earth, and ſo well rammed, as it ſhall hold water as well as a pipe of Lead.

It ſhall alſo have vents given it in very many places, to make it run the more ſwiftly, and to diſcover the defects, if any ſhould happen in the worke.

This Aqueduct being thus made, and the ſprings walled in and brought under ground in a cloſe vault or channell of Bricke ſo made that no part of them can ſoak through, or break away, the water will riſe as high as the Conſerve at *Iſlington*, as it ſtands, in the Pond at *Lynch mill*; and though the channell be made upon an exact levell, yet the water will have ſo much fall as is between the top of the Pond, and the bottom of the channell, and the channell being by this meanes kept alwayes full, will be far ſtronger, and freer from danger of decay.

At either end of this Aqueduct ſhall be a double ſet, or grate made to keep out whatſoever may annoy or hinder the paſſage of the water, and to ſuffer nothing but water to go in.

And by this worke thus done, the Cities of *London* and *Weſtminſter*, and other places adjoyning ſhall be continually, and plentifully ſerved and ſupplied with excellent good water, fit for any uſe, either for dreſſing of meat, for waſhing, baking, brewing, or drinking.

The ſecurity offered for the performance of this worke is this. Firſt, the money raiſed and given for it ſhall be depoſited in the Chamber of *London*, or in ſuch other ſafe hands as the Parliament ſhall appoint.

Secondly, Sir *Walter Roberts* and his partners will make the worke, and the charge of it certain, before they demand any money; by finiſhing part of the worke at their owne charge, and bringing all the water part of the way, and part of the water to *London*, The firſt whereof will ſhew the charge of the worke, the ſecond the certainty: when they have done ſo much of the worke, as ſhall make the charge, feacibility, and certainty of it appear, they will deſire to be paid for it; and with that money they will go on and finiſh ſo much more thereof, as that will finiſh: and ſo from time to time they will perfect ſo much of the worke, as they demand money for, before they demand it. Beſides they will give their bonds and covenants to finiſh the worke in a convenient time, and to performe the contract made with his Majeſty. And this we conceive to be better ſecurity for the performance of a worke, than any by bonds or lands can be; for no ſecurity can make a thing feacible, that is not ſo in it ſelfe; and this being feacible, there can be

be no better way to aſcertain the doing of it, than this is.

Security for payment of money is one thing, ſecurity for performance of a worke another. That which is good ſecurity for the payment of mony, may be no good ſecurity for the performance of a worke: and on the contrary, that may be good ſecurity for the performance of a worke, that is not good ſecurity for the payment of money. For inſtance: an ignorant rich man undertakes to do a worke which he underſtands not, nor hath any skill in, and gives ſecurity by bond, and covenant to performe it: this though the man be a good man, is no good ſecurity that the thing ſhall be done, becauſe he knowes not how to do it, and perhaps hath undertaken that which is not to be done. On the other ſide, a poore Artificer, that is an honeſt underſtanding man, and his Arts-maſter, undertakes to do a worke that will coſt 2000. pounds, whereas he is not worth perhaps 1000. pence, and gives his bond and covenant to performe it. This is good ſecurity for the performance of this work, and better than the other, becauſe this man is both able and willing to performe what he hath undertaken, and is bound to do, which the other is not, but hath undertaken and bound himſelfe to do that, which is not to be done, and therefore may and muſt forfeit his bond, but can never do the worke, which would be M. *Fords* caſe, if he ſhould give ſecurity to bring a Navigable River from *Rickmanſworth* in *Hartfordſhire* to S. *Giles* in the fields, and to deliver the water thereof as pure, as it is in its owne nature, which is abſolutely impoſſible, and the other not feacible without a charge far greater than the profit. And now I will adde a word or two in anſwer of thoſe objections, which are made againſt this worke; which are theſe three:

The firſt, that theſe Springs falling into the River of Lee, and containing ſo great a quantity of water, as 12000. *Tun in twenty four houres, the taking away of them will prejudice Navigation upon that River.*

The ſecond, that if any breach ſhould happen in this worke after it is finiſhed, and ſhould drowne or ſpoil mens Corne or Meddowes, how ſhall they be ſatisfied for that damage?

The third, that the whole profit of this worke, if it be effected, will not anſwer the rent of 4000. *pounds a year reſerved to his Majeſty?*

The two firſt of theſe are made by the inhabitants of *Hartfordſhire*. The laſt by Sir *W. Middleton*, and M. *Ford*, who oppoſe, and would hinder this good worke, to them all I hope I ſhall give full and ſatisfactory anſwers: and to the firſt my anſwer is, that the River of *Lee* is Navigable to *Ware*, which is 5. or 6. miles higher than *Broxbourne*, where theſe ſprings fall into it.

That between *Ware* and *Broxbourne*, there fall into this River of *Lee* two other Rivers, containing four times as much water as theſe ſprings which we take away, and yet the River is navigable two or three miles above the place where theſe ſtreames fall into it.

That this River before it comes to *Broxbourne*, is divided into two branches, and yet is navigable notwithſtanding, and theſe ſprings which we take away fall into that branch of *Lee* which is not navigable, & not into the main River, untill that branch fals into it again, that this River where theſe ſprings fall into it, is 80. foot wide and 8. foot deep, and the water which we ſhall take from it, is onely a Mill-ſtream, which it hath not alwaye neither, being ſometimes for four houres together pen up by the Millar, yet is the River navigable nevertheleſſe all that time, as well as when the Mill goes. Now

Now whether a Mill-ſtream cut off from a River that is 80. foot wide, and 8. foot deep and navigable 5. or 6. miles higher than where theſe ſprings fall into it can at all prejudice or concerne Navigation, I leave to the judgement of thoſe that are judicious in matters of this nature; and will onely ſay this, that the ſame objection lies more ſtrongly againſt Sir *William Middletons* worke and M. *Fords* propoſition.

Sir *William Middletons* water being taken from ſprings which did fall into the ſame River 5. miles higher than where theſe fall in. And M. *Ford* propoſing to take his new Navigation out of the River of *Colne* which fals into the River of *Thames* about *Staines*, and will exceedingly prejudice Navigation upon that River between *Staines* and *London*. The Bargemen many times wanting water now between thoſe places; and if he take away ſo much as will make a Navigable River in another place, they muſt needs want ſo much more as he takes away; and Navigation upon *Thames* is of ten times more conſequence than this new Navigation can be, which is an objection againſt his worke worth the anſwering, and not yet anſwered. And if the taking away of a Mill-ſtream from a Navigable River ſhal be admitted for a prejudice to Navigation; this will be an objection againſt all Aqueducts as well as this, ſince there is no water but fals into ſome Navigable River or other, before it comes into the ſea.

Beſides, if the taking away of theſe ſprings from this River would be ſome ſmall prejudice to Navigation upon it (as it will not) yet it were *Damnum ſine injuria*, ſince we take them not out of the River, but divert them another way before they fall into it. And though to take water out of a River to the prejudice of others be not

lawfull, yet it is lawfull for any man that hath ſprings riſing in his owne Land, to divert or convert them to what uſe he will, or elſe no man might erect Mils or bring water to his owne houſe.

I have been the more large in anſwering this objection becauſe prejudice to Navigation makes a great noiſe, and ſuch as either cannot or will not underſtand what is prejudiciall, and what is not, are apt to beleeve, or at leaſt to pretend a prejudice where there is none. But I am confident, that ſuch as can judge, and come not with a prejudicate opinion, will be clearly ſatisfied with that which hath been ſaid, That the diverting of theſe ſprings cannot by any poſſibility prejudice Navigation upon the River of *Lee* into which they now fall; but to ſatisfie the Countrey and all whom this worke concernes more fully, that there is no intention to prejudice them by it, Sir *Walter Roberts* will undertake at his owne charge to make Navigation upon that River below *Broxbourne*, where theſe ſprings fall into it, better than it is above that place, ſo as they will give their free conſent to this publique good worke, and will not put him to any unneceſſary charge or trouble, and he doth hope and preſume that all that wiſh well to the common good will be ready to afford him their furtherance in it, which he ſhall ſtrive and endeavour to deſerve of them. And ſo I come to the ſecond objection, which is a *Quære*.

How the Owners and Farmours through whoſe Lands this Aqueduct is to be carried, ſhall be ſatisfied for the damage which they ſhall receive by it.

To which I anſwer, That every mans damage ſhal be valued by himſelfe, or by ſuch Commiſſioners as the Parliament ſhall appoint, and he ſhall receive full ſatiſfaction

faction for it before any worke be done in his land; and for any damage that ſhall happen afterward by any leak, or breach in the worke when it is finiſhed, They ſhall have the ſame ſatisfaction paid them as ſoon as the damage is done, and valued. And this damage cannot be much, nor happen often, becauſe as ſoon as any ſuch leak or breach ſhall be perceived, the waters ſhall all preſently be drawne away out of the Aqueduct or channell, and turned into the River of *Lee*, where it runnes now, by a gut laid (as before) in the bottom of the Pond, till the ſaid leak or breach ſhal be amended, and the damage ſatisfied. And moſt of thoſe lands which we are to paſſe throughly upon a ſide-hill, ſo as there can be no danger of flowing their corne, hay, or graſſe, though a breach ſhould happen in the worke, and for water to run over land, and not to flow it, or ſtand upon it, is many times a benefit, and enriching, and can at no time be any great damage to it, yet whatſoever the damage be, it ſhall be ſatisfied as ſoon as it is done and valued, and before the breach be amended. Theſe two objections concerne the inhabitants of *Hartfordſhire*, and the owners and farmours through whoſe lands the Aqueduct ſhall paſſe, and I hope they are fully anſwered.

The third and laſt concernes his Majeſty and the undertakers of the worke; and is made by Sir *W. Middleton* and M. *Ford*, who have left nothing unſaid, that might be objected againſt it; but rather than they would want objections have at ſeverall times objected things contrary one to another: for when this buſineſſe was in agitation before the Lords of the Parliament, then the main objection, that theſe Gentlemen made againſt this worke, was:

That theſe Springs did not yeeld water enough to ſupply thoſe places that were to be ſupplied by them.

When that was anſwered, and a Bill preferred in the

Houſe

Houſe of Commons, to have an Act of Parliament for the better doing of this worke, then they come with a contrary objection; and pretend that theſe ſprings yeeld ſuch a great quantity of water, that the diverting of them, will prejudice Navigation upon the River of *Lee*, which is 80. foot wide, and 8. foot deep, and navigable 5. miles above the place where theſe ſprings fall into it. But as their objection is very eaſily anſwered, ſo their oppoſition is a ſtrong argument (whatſoever they pretend to the contrary) that they conceive this worke to be both feacible and profitable to the Common-wealth; for if it were not both, it could not prejudice them, nor their workes, nor ſtir them up to oppoſe it as they do: and being feacible and good for the Common-wealth, I hope their oppoſition ſhall not hinder it.

And whereas they affirme, that ſo great a rent as 4000. pounds a year cannot be raiſed out of this worke; If they will admit but this ground (which they cannot with reaſon deny) that men will be willing to give as much for good water, as they give now for bad, I will make it very plain and demonſtrative, that the rents and profits of this worke will be above 10000. pounds a year. For 12000. Tun of water which is the quantity and proportion that theſe ſprings do yeeld in 24. houres, will plentifully ſerve above 40000. houſes, which at 5. ſhillings an houſe comes to 10000. pounds a year, and the pooreſt men will not grutch to give 5. ſhillings a year for good water, which is little above a penny a week.

And thus having at large ſhewed the feacibility and benefit of this worke, and anſwered the objections made againſt it, I ſhall be an humble ſuitor to his Majeſty, and to both Houſes, that we may have an Act of Parliament for the better doing of it, that we looſe not the benefit of this year, having money & materials provided and ready for it.

FINIS.